

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/061,201

DATE: 02/27/2002 TIME: 08:27:47

Input Set : D:\pto\_PB0178.txt

Output Set: N:\CRF3\02272002\J061201.raw

1 <110> APPLICANT: Shannon, Mark 3 <120> TITLE OF INVENTION: HUMAN POSH-LIKE PROTEIN 1 5 <130> FILE REFERENCE: PB0178 C--> 7 <140> CURRENT APPLICATION NUMBER: US/10/061,201 C--> 7 <141> CURRENT FILING DATE: 2002-01-30 7 <150> PRIOR APPLICATION NUMBER: PCT/US01/00666 8 <151> PRIOR FILING DATE: 2001-01-30 10 <150> PRIOR APPLICATION NUMBER: PCT/US01/00667 11 <151> PRIOR FILING DATE: 2001-01-30 13 <150> PRIOR APPLICATION NUMBER: PCT/US01/00664 14 <151> PRIOR FILING DATE: 2001-01-30 16 <150> PRIOR APPLICATION NUMBER: PCT/US01/00669 17 <151> PRIOR FILING DATE: 2001-01-30 19 <150> PRIOR APPLICATION NUMBER: PCT/US01/00665 20 <151> PRIOR FILING DATE: 2001-01-30 22 <150> PRIOR APPLICATION NUMBER: PCT/US01/00668 23 <151> PRIOR FILING DATE: 2001-01-30 25 <150> PRIOR APPLICATION NUMBER: PCT/US01/00663 26 <151> PRIOR FILING DATE: 2001-01-30 28 <150> PRIOR APPLICATION NUMBER: PCT/US01/00670 29 <151> PRIOR FILING DATE: 2001-01-30 31 <150> PRIOR APPLICATION NUMBER: US 09/864,761 32 <151> PRIOR FILING DATE: 2001-05-23 34 <150> PRIOR APPLICATION NUMBER: US 60/328,205 35 <151> PRIOR FILING DATE: 2001-10-10 37 <160> NUMBER OF SEQ ID NOS: 4162 39 <170> SOFTWARE: Aeomica Sequence Listing Engine 41 <210> SEQ ID NO: 1 42 <211> LENGTH: 2497 43 <212> TYPE: DNA 44 <213> ORGANISM: Homo sapiens 46 <400> SEQUENCE: 1 47 aaagttttca aagcggttgg cagcagcggc gcttggagga aaggaagccg gttggagggc 60 49 acaaggcaaa aattctgacg ttctcaagag accagctctg cccccgtggc tcaactgacc 180 50 ctaccatgtg gacgctgctc ctccaggtgg gaactggagt tttgaaataa aatggatgat 240 51 ttgacgttac ttgatcttct ggagtgccct gtgtgctttg agaagctcga tgtcacagcc 300 52 aaagtcctcc cttgccagca caccttctgc aaaccatgtc tacagagggt tttcaaggcc 360 53 cacaaagagc tgcggtgccc cgaatgcagg acgcctgtgt tttccaacat tgaggcgctg 420 54 ccggccaacc tgctgctcgt gcgccttctg gatggagtgc gctcagggca gagctccggg 480

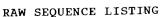
55 agaggggget cetteegeag geetggeacg atgacettge aggatggeag gaaaageagg 540 56 accaaceea gaegtetgea ggeeagteet tteeggetag tgeetaatgt cagaateeac 600 57 atggatgggg tgeetegage aaaggeetta tgeaactaea gagggeagaa teeeggtgae 660

ENTERED

## RECEIVED

APR 2 9 2002

**TECH CENTER 1600/2900** 



PATENT APPLICATION: US/10/061,201

DATE: 02/27/2002 TIME: 08:27:47

Input Set : D:\pto\_PB0178.txt

```
58 ctaaggttta ataagggaga tatcatcctt ctccggagac agcttgatga gaattggtac 720
59 cagggggaaa tcaatggcat cagcgggaac ttcccagcca gctccgtgga agtcatcaag 780
60 cagetgeece ageegeece getetgeagg geeetetaca aettegaeet aegaggeaag 840
61 gacaagagtg agaaccagga ttgcctgacc ttcctcaagg acgatatcat cactgtgatc 900
62 agccgagtgg atgagaactg ggcagaaggc aagttaggag ataaagtagg catcttccct 960
63 atcttgtttg tagagccaaa cctcaccgca agacaccttt tagagaagaa caaaggtcgc 1020
64 cagtcatect gcacaaaaaa eetgteeetg gtgteetegt eetecagagg caacaegtet 1080
65 accetecgta ggggeceagg gtecaggagg aaggtgeetg ggeagtitte cateacaaca 1140
66 gccttgaaca ctctcaaccg gatggtccat tctccttcag ggcgccatat ggtagagatc 1200
67 agcaccccag tgctcatcag ctccagcaac ccctctgtga tcacccagcc catggagaaa 1260
68 gcagacgttc cttccagctg tgtgggacag gtcagcactt atcaccccgc acctgtctct 1320
69 ccaggacatt ccacagccgt ggtcagtctg cctggctccc agcaacacct ctcagcgaac 1380
70 atgtttgtag ccctgcactc ctactcagcc catggacccg atgagctgga cctgcaaaag 1440
71 ggagaaggeg teagggteet ggggaagtge eaggaegget ggeteagggg egteteettg 1500
72 gtcaccgggc gagtcggcat cttcccaaac aattacgtca tccccatttt cagaaagacc 1560
73 totagttttc cagacteceg gagecetggt etetacacca catggaegtt atecacetee 1620
74 totgtgtoot occaaggoag catttoagaa ggtgatocac ggcaaagcog tocottoaaa 1680
75 teegtetttg tgeecactge catagteaac eeegtgagaa geacageegg eeetgggact 1740
76 ttaggacaag ggtctcttcg gaaagggcgg agcagcatga gaaagaatgg atccctgcag 1800
77 agaccectec agteegggat ecceaetete gtggtagget eccteagaeg eageeceaee 1860
78 atggtccttc ggcctcagca gttccaattc taccagccac aggggatccc ctcctcccc 1920
79 tcagccgtgg tggtggagat ggggtccaag cctgccctca cgggggagcc cgccctcacg 1980
80 tgcatcagca ggggcagtga ggcccggacc cactccgcgg ccagctccct cattatggaa 2040
81 gacaaagaaa teeccatcaa gagtgageet etgecaaaae egeeegeate tgeeecacca 2100
82 tocatoctgg tgaaaccaga aaactcaaga aatggcatcg aaaagcaagt caaaaccgtg 2160
83 agatttcaga attacagece tecteccaec aaacattaca ceteccatee caceteegga 2220
84 aagcotgaac agocagocac cotcaaggog toccagootg aagcagogto ottgggooca 2280
85 gagatgaccg tectatttge ceaecgaagt ggetgeeact eeggacagea gacagacete 2340
86 cggagaaagt cagctettge caaggeeaca accetggtgt ceaetgeete aggeacgeag 2400
87 acceptettic ccaecaaate aacctacege teactitic tagaccccaa agageteaat 2460
                                                                      2497
88 tgcatttaaa tacagtctgc ctccactaaa aaaaaaa
90 <210> SEQ ID NO: 2
91 <211> LENGTH: 2190
92 <212> TYPE: DNA
93 <213> ORGANISM: Homo sapiens
 95 <400> SEQUENCE: 2
96 atggatgatt tgacgttact tgatcttctg gagtgccctg tgtgctttga gaagctcgat 60
97 gtcacagcca aagtcctccc ttgccagcac accttctgca aaccatgtct acagagggtt 120
 98 ttcaaggccc acaaagagct gcggtgcccc gaatgcagga cgcctgtgtt ttccaacatt 180
 99 gaggegetge eggecaacet getgetegtg egeettetgg atggagtgeg etcagggeag 240
 100 agctccggga gagggggctc cttccgcagg cctggcacga tgaccttgca ggatggcagg 300
 101 aaaagcagga ccaaccccag acgtctgcag gccagtcctt tccggctagt gcctaatgtc 360
 102 agaatccaca tggatggggt gcctcgagca aaggccttat gcaactacag agggcagaat 420
 103 cccggtgacc taaggtttaa taagggagat atcateette teeggagaca gettgatgag 480
 104 aattggtacc agggggaaat caatggcatc agcgggaact tcccagccag ctccgtggaa 540
 105 gtcatcaagc agctgcccca gccgcccccg ctctgcaggg ccctctacaa cttcgaccta 600
 106 cgaggcaagg acaagagtga gaaccaggat tgcctgacct tcctcaagga cgatatcatc 660
 107 actgtgatca gccgagtgga tgagaactgg gcagaaggca agttaggaga taaagtaggc 720
 108 atotteecta tettgtttgt agagecaaac etcacegeaa gacacetttt agagaagaac 780
```

RAW SEQUENCE LISTING PATENT APPLICATION: US/10/061,201 TIME: 08:27:47

DATE: 02/27/2002

Input Set : D:\pto\_PB0178.txt

| 109   |  | + ~~  |  | rt a a 1  | cctc  | r cad   | raaaa  | aaac   | ctat   | caat                           | ara t                                 | tatco                                      | ctcgi                                  | tc c   | tccag                          | gaggc                                 | 840  |
|---|--|---|--|---|---|---|--|--|--|--------------------------------|---------------------------------------|--|--|--|--------------------------------|---------------------------------------|------|
| 110   | aaagg  | ,   | o ay   | acto  | rata  | a aa  | TCCC   | aaaa   | tada   | aggag                          | aga a                                 | agato                                      | acct                                   | aa a   | cagtt                          | ttcc                                  | 900  |
| 110   | aacac  | 29 LC1  | .a C   | 30 L.C.   | og cas  | 999   | traar  | בכממ.  | ato  | at da                          | atiti (                               | eteci                                      | ttca                                   | वय य   | cgcca                          | atatg                                 | 960  |
| 111   | atcac  | caaca   | ag Co  | 2009  | acac  | - ~~  | tast   | cade   | + cc   | agraz                          | acc o                                 | aat.a                                      | tata:                                  | at c   | accca                          | agccc                                 | 1020 |
| 112   | gtaga  | agato   | ca go  | cacco   | 30ayı   | - yc  | aaaa   | atat   | ata  | rgac                           | add .                                 | tcaq                                       | cact:                                  | ta t   | cacco                          | ccgca                                 | 1080 |
| 113   | atgga  | agaaa   | ag ca  | agac  | 3 L L C C   | יוו נ   | acag   | aata   | g t g  | gguc.                          | tac (                                 | rtaa:                                      | atac                                   | ca o   | caaca                          | acctc                                 | 1140 |
| 114   | cctgt  | ctc   | to ca  | agga  | catto   | c ca  | cago   |  | +20  | tasa                           | age                                   | ataa.                                      | 2000                                   | ra t   | gaget                          | tagac                                 | 1200 |
| 115   | tcago  | cgaa  | ca to  | gttt  | gtago   | c cc  | tgca   | CLCC   | Lac  | ccay                           | ~~~                                   | 2099                                       | accc.                                  | ta a   | ctca                           | tggac                                 | 1260 |
| 116   | ctgca  | aaaa  | gg g   | agaa  | aaca.   | t ca  | gggt   | cctg   | ggg.   | aagu                           | gee i                                 | ayya.                                      | -4+ c                                  | 19 9<br>1+ 4   | acca;                          | ggggc                                 | 1320 |
| 117   | gtct   | cctt  | gg t   | cacc  | gggc  | g ag  | tcgg   | catc   | ttc  | ccaa                           | aca                                   | alla<br>                                   |  | al C   | + ~ ~ ~                        | ttttc                                 | 1380 |
| 118   | agaaa  | agac  | ct c   | tagt  | tttc  | c ag  | actc   | ccgg   | agc  | cctg                           | gtc                                   | lCLa                                       | cacc                                   | ac a<br>~  | cgga                           | cgtta                                 | 1440 |
| 119   | tcca   | cata  | ct c   | tgtg  | tcct  | c cc  | aagg   | cagc   | att  | tcag                           | aag                                   | gtga                                       | tcca                                   | eg g   | Caaa                           | gccgt                                 | 1500 |
| 120   | ccct.  | tcaa  | at c   | cgtc  | tttg  | t gc  | ccac   | tgcc   | ata  | gtca                           | acc                                   | ccgt                                       | gaga                                   | ag c   | acag                           | ccggc                                 | 1500 |
| 101   | +  |   | ++ +   | 2002  | caadi   | a at  | ctct   | taaa   | aaa  | aaac                           | qqa                                   | qcaq                                       | catg                                   | ag a   | aaya                           | atyya                                 | 1300 |
| 1 2 2   | + 000  | + ~ ~ ~   | α a α  | 2000  | ctcc  | a at  | adaa   | gatc   | CCC  | actc                           | tcg                                   | tggt                                       | aggc                                   | tc c   | ctca                           | gadge                                 | 1020 |
| 100   | -~~~   | ~~~~  | a - +  | aata  | atta  | ם מכ  | ctical                                       | acaa   | ttc  | caat                           | tct                                   | acca                                       | geca                                   | ca y   | yyya                           |                                       | 1000 |
| 121   | + cct  | ~~~   | ct c   | addd  | ataa  | t aa  | taaa   | qatq   | qqq  | tcca                           | agc                                   | ctgc                                       | CCLC                                   | ac y   | 9999                           | ayece                                 | 1,40 |
| 125   | accc   | tcac  | at a   | catc  | aσca  | a aa  | qcaq   | tgag   | gcc  | cgga                           | CCC                                   | actc                                       | egeg                                   | ge e   | aycı                           |                                       | 1000 |
| 126   | a++a   | + ~ ~ ~   | 2 A 2  | caaa  | gaaa  | t cc  | ccat   | caaq   | aqt  | gage                           | ctc                                   | tgcc                                       | aaaa                                   | cc g   | eeeg                           | Calli                                 | 1000 |
| 107   | ~~~  | ~~~   | a + a  | catc  | ataa  | t da  | aacc   | agaa   | aac  | tcaa                           | qaa                                   | atgg                                       | catc                                   | ga a   | aagc                           | aaytt                                 | 1920 |
| 129   | 2222   | acat  | ra r   | attt  | caga  | a tt  | acaq   | ccct   | cct  | ccca                           | cca                                   | aaca                                       | LLac                                   | ac c   |                                | accec                                 | 1000 |
| 120   | t  | ~~~   | 2 2  | acct  | gaac  | a orc   | cago   | cacc   | ctc  | aaqq                           | cqt                                   | ccca                                       | gccı                                   | .ga a  | .ycay                          | cy ccc                                | 2040 |
| 122   | ++~~   | cc99  | aa a   | gata  | acco  | t aa  | tatt   | t.acc  | cac  | cgaa                           | qtq                                   | gctg                                       | ccac                                   | tc c   | ggac                           | agcag                                 | 2100 |
| 130   | LLGG   | geee  | ay a   | gaty  | accy  | c an  | ctct   | taco   | aad  | acca                           | caa                                   | ccct                                       | ggtg                                   | tc c   | actg                           | cctca                                 | 2160 |
| 131   | acay   | accu  | ee g   | yaya<br>aata  | +++0  | c ca  | acaa   | atga   |  | J                              |                                       |  |  |  |                                |                                       | 2190 |
| 132 ggcacgcaga ccgtgtttcc cagcaaatga<br>134 <210> SEQ ID NO: 3  |  |   |  |   |   |   |  |  |  |                                |                                       |  |  |  |                                |                                       |      |
|   | <710   | > 5E  | U IL   | NO.   | 2   |   |  |  |  |                                |                                       |  |  |  |                                |                                       |      |
|   | -011   |   |  |   |   |   |  |  |  |                                |                                       |  |  |  |                                |                                       |      |
| 135   | <211   |   | NGTH   | : 72  |   |   |  |  |  |                                |                                       |  |  |  |                                |                                       |      |
| 135<br>136  | <212   | > TY  | NGTH   | : 72<br>PRT   | 9   |   | dene   | •  |  |                                |                                       |  |  |  |                                |                                       |      |
| 135<br>136<br>137   | <212<br><213   | > TY<br>> OF  | NGTH<br>PE:<br>GANI  | : 72<br>PRT<br>SM:  | 9<br>Homo   | sap   | oiens  | <b>.</b>                                     |  |                                |                                       |  |  |  |                                |                                       |      |
| 135<br>136<br>137   | <212<br><213   | > TY<br>> OF  | NGTH<br>PE:<br>GANI  | : 72<br>PRT<br>SM:  | 9<br>Homo   |   |  |  | Len  | T.All                          | Glu                                   | Cvs  | Pro                                    | Val  | Cvs                            | Phe                                   |      |
| 135<br>136<br>137<br>139<br>140   | <212<br><213<br><400<br>Met  | > TY<br>> OF  | NGTH<br>PE:<br>GANI  | : 72<br>PRT<br>SM:  | 9<br>Homo<br>3<br>Thr                             |   |  |  | Leu  | Leu                            | Glu                                   | Cys  | Pro                                    | Val  | Cys                            | Phe                                   |      |
| 135<br>136<br>137<br>139<br>140   | <212<br><213<br><400<br>Met  | > TY<br>> OR<br>> SE<br>Asp   | NGTH<br>PE:<br>GANI<br>QUEN<br>Asp   | PRT<br>SM:<br>ICE:<br>Leu                                 | 9 Homo 3 Thr                                      | Leu   | Leu  | Asp  |  | Τ0                             |                                       |  |  |  | 10                             |                                       |      |
| 135<br>136<br>137<br>139<br>140   | <212<br><213<br><400<br>Met  | > TY<br>> OR<br>> SE<br>Asp   | NGTH<br>PE:<br>GANI<br>QUEN<br>Asp   | PRT<br>SM:<br>CE:<br>Leu<br>Asp                           | 9 Homo 3 Thr                                      | Leu   | Leu  | Asp  | Val  | Τ0                             |                                       |  |  | His  | 10                             |                                       |      |
| 135<br>136<br>137<br>139<br>140<br>141  | <212<br><213<br><400<br>Met<br>1<br>Glu  | > TY<br>> OF<br>> SE<br>Asp<br>Lys  | NGTH<br>PE:<br>GANI<br>QUEN<br>Asp<br>Leu  | PRT SM: LEU Asp   | 9<br>Homo<br>3<br>Thr<br>5<br>Val                 | Leu<br>Thr  | Leu<br>Ala                                   | Asp<br>Lys                                   | Val<br>25  | 10<br>Leu                      | Pro                                   | Cys  | Gln                                    | His<br>30  | Thr                            | Phe                                   |      |
| 135<br>136<br>137<br>139<br>140<br>141  | <212<br><213<br><400<br>Met<br>1<br>Glu  | > TY<br>> OF<br>> SE<br>Asp<br>Lys  | NGTH<br>PE:<br>GANI<br>QUEN<br>Asp<br>Leu  | PRT SM: LEU Asp   | 9<br>Homo<br>3<br>Thr<br>5<br>Val                 | Leu<br>Thr  | Leu<br>Ala                                   | Asp<br>Lys<br>Val                            | Val<br>25  | 10<br>Leu                      | Pro                                   | Cys  | Gln<br>Lys                             | His<br>30  | Thr                            | Phe                                   |      |
| 135<br>136<br>137<br>139<br>140<br>141<br>143<br>144  | <212<br><213<br><400<br>Met<br>1<br>Glu  | > TY<br>> OF<br>> SE<br>Asp<br>Lys  | NGTH<br>PE:<br>GANI<br>QUEN<br>Asp<br>Leu<br>Pro   | PRT SM: SM: LEU Asp 20 Cys                                | 9 Homo 3 Thr 5 Val Leu                            | Leu<br>Thr<br>Gln                                   | Leu<br>Ala<br>Arg                            | Asp<br>Lys<br>Val<br>40                      | Val<br>25<br>Phe   | Leu<br>Lys                     | Pro<br>Ala                            | Cys<br>His                                 | Gln<br>Lys<br>45                       | His<br>30<br>Glu   | Thr<br>Leu                     | Phe<br>Arg                            |      |
| 135<br>136<br>137<br>139<br>140<br>141<br>143<br>144  | <212<br><213<br><400<br>Met<br>1<br>Glu  | > TY<br>> OF<br>> SE<br>Asp<br>Lys  | NGTH<br>PE:<br>GANI<br>QUEN<br>Asp<br>Leu<br>Pro   | PRT SM: SM: LEU Asp 20 Cys                                | 9 Homo 3 Thr 5 Val Leu                            | Leu<br>Thr<br>Gln                                   | Leu<br>Ala<br>Arg<br>Pro                     | Asp<br>Lys<br>Val<br>40                      | Val<br>25<br>Phe   | Leu<br>Lys                     | Pro<br>Ala                            | Cys<br>His<br>Ile                          | Gln<br>Lys<br>45                       | His<br>30<br>Glu   | Thr<br>Leu                     | Phe<br>Arg                            |      |
| 135<br>136<br>137<br>139<br>140<br>141<br>143<br>144<br>146<br>147                                    | <212<br><213<br><400<br>Met<br>1<br>Glu<br>Glu   | > TY<br>> OF<br>> SE<br>Asp<br>Lys<br>Lys                                   | PE:<br>GANI<br>QUEN<br>Asp<br>Leu<br>Pro<br>35<br>Glu  | PRT SM: ICE: Leu Asp 20 Cys                               | 9 Homo 3 Thr 5 Val Leu Arg                        | Leu<br>Thr<br>Gln<br>Thr                            | Leu<br>Ala<br>Arg<br>Pro<br>55               | Asp<br>Lys<br>Val<br>40<br>Val               | Val<br>25<br>Phe<br>Phe                                    | Leu<br>Lys<br>Ser              | Pro<br>Ala<br>Asn                     | Cys<br>His<br>Ile                          | Gln<br>Lys<br>45<br>Glu                | His<br>30<br>Glu<br>Ala                                    | Thr<br>Leu<br>Leu              | Phe<br>Arg<br>Pro                     |      |
| 135<br>136<br>137<br>139<br>140<br>141<br>143<br>144<br>146<br>147                                    | <212<br><213<br><400<br>Met<br>1<br>Glu<br>Glu   | > TY<br>> OF<br>> SE<br>Asp<br>Lys<br>Lys                                   | PE:<br>GANI<br>QUEN<br>Asp<br>Leu<br>Pro<br>35<br>Glu  | PRT SM: ICE: Leu Asp 20 Cys                               | 9 Homo 3 Thr 5 Val Leu Arg                        | Leu<br>Thr<br>Gln<br>Thr                            | Leu<br>Ala<br>Arg<br>Pro<br>55               | Asp<br>Lys<br>Val<br>40<br>Val               | Val<br>25<br>Phe<br>Phe                                    | Leu<br>Lys<br>Ser              | Pro<br>Ala<br>Asn<br>Gly              | Cys<br>His<br>Ile                          | Gln<br>Lys<br>45<br>Glu                | His<br>30<br>Glu<br>Ala                                    | Thr<br>Leu<br>Leu              | Phe Arg Pro Gln                       |      |
| 135<br>136<br>137<br>139<br>140<br>141<br>143<br>144<br>146<br>145<br>150                             | <212<br><213<br><400<br>Met<br>1<br>Glu<br>Cys<br>Cys  | > TY<br>> OF<br>> SE<br>Asp<br>Lys<br>Lys<br>Pro<br>50<br>Asn               | PE:<br>GANI<br>QUEN<br>Asp<br>Leu<br>Pro<br>35<br>Glu  | PRT SM: SM: LEU Asp 20 Cys Cys Leu                        | 9 Homo 3 Thr 5 Val Leu Arg                        | Leu<br>Thr<br>Gln<br>Thr<br>Val                     | Leu<br>Ala<br>Arg<br>Pro<br>55<br>Arg        | Asp<br>Lys<br>Val<br>40<br>Val<br>Leu        | Val<br>25<br>Phe<br>Phe<br>Leu                             | Leu<br>Lys<br>Ser              | Pro<br>Ala<br>Asn<br>Gly<br>75        | Cys<br>His<br>Ile<br>60<br>Val             | Gln<br>Lys<br>45<br>Glu<br>Arg         | His<br>30<br>Glu<br>Ala<br>Ser                             | Thr Leu Leu Gly                | Phe Arg Pro Gln 80                    |      |
| 135<br>136<br>137<br>139<br>140<br>141<br>143<br>144<br>146<br>145<br>150                             | <212<br><213<br><400<br>Met<br>1<br>Glu<br>Cys<br>Cys  | > TY<br>> OF<br>> SE<br>Asp<br>Lys<br>Lys<br>Pro<br>50<br>Asn               | PE:<br>GANI<br>QUEN<br>Asp<br>Leu<br>Pro<br>35<br>Glu  | PRT SM: SM: LEU Asp 20 Cys Cys Leu                        | 9 Homo 3 Thr 5 Val Leu Arg                        | Leu<br>Thr<br>Gln<br>Thr<br>Val                     | Leu<br>Ala<br>Arg<br>Pro<br>55<br>Arg        | Asp<br>Lys<br>Val<br>40<br>Val<br>Leu        | Val<br>25<br>Phe<br>Phe<br>Leu                             | Leu<br>Lys<br>Ser              | Pro<br>Ala<br>Asn<br>Gly<br>75        | Cys<br>His<br>Ile<br>60<br>Val             | Gln<br>Lys<br>45<br>Glu<br>Arg         | His<br>30<br>Glu<br>Ala<br>Ser                             | Thr Leu Leu Gly Thr            | Phe Arg Pro Gln 80                    |      |
| 135<br>136<br>137<br>139<br>140<br>141<br>143<br>144<br>146<br>150<br>150                             | <212<br><213<br><400<br>Met<br>1<br>Glu<br>Cys<br>Cys<br>Ala<br>65<br>Ser  | > TY<br>> OF<br>> SE<br>Asp<br>Lys<br>Lys<br>Pro<br>50<br>Asn               | MGTH<br>PE:<br>GANI<br>QUEN<br>Asp<br>Leu<br>Pro<br>35<br>Glu<br>Leu   | PRT SM: SM: ICE: Leu Asp 20 Cys Cys Leu Arg               | 9 Homo 3 Thr 5 Val Leu Arg Leu Gly 85             | Leu<br>Thr<br>Gln<br>Thr<br>Val<br>70<br>Gly        | Leu<br>Ala<br>Arg<br>Pro<br>55<br>Arg<br>Ser | Asp<br>Lys<br>Val<br>40<br>Val<br>Leu        | Val<br>25<br>Phe<br>Phe<br>Leu<br>Arg                      | Lys Ser Asp Arg                | Pro<br>Ala<br>Asn<br>Gly<br>75<br>Pro | Cys<br>His<br>Ile<br>60<br>Val             | Gln<br>Lys<br>45<br>Glu<br>Arg<br>Thr  | His<br>30<br>Glu<br>Ala<br>Ser<br>Met                      | Thr Leu Leu Gly Thr 95         | Phe<br>Arg<br>Pro<br>Gln<br>80<br>Leu |      |
| 135<br>136<br>137<br>139<br>140<br>141<br>143<br>144<br>146<br>150<br>150                             | <212<br><213<br><400<br>Met<br>1<br>Glu<br>Cys<br>Cys<br>Ala<br>65<br>Ser  | > TY<br>> OF<br>> SE<br>Asp<br>Lys<br>Lys<br>Pro<br>50<br>Asn               | MGTH<br>PE:<br>GANI<br>QUEN<br>Asp<br>Leu<br>Pro<br>35<br>Glu<br>Leu   | PRT SM: SM: ICE: Leu Asp 20 Cys Cys Leu Arg               | 9 Homo 3 Thr 5 Val Leu Arg Leu Gly 85             | Leu<br>Thr<br>Gln<br>Thr<br>Val<br>70<br>Gly        | Leu<br>Ala<br>Arg<br>Pro<br>55<br>Arg<br>Ser | Asp<br>Lys<br>Val<br>40<br>Val<br>Leu        | Val<br>25<br>Phe<br>Phe<br>Leu<br>Arg                      | Lys Ser Asp Arg                | Pro<br>Ala<br>Asn<br>Gly<br>75<br>Pro | Cys<br>His<br>Ile<br>60<br>Val             | Gln<br>Lys<br>45<br>Glu<br>Arg<br>Thr  | His<br>30<br>Glu<br>Ala<br>Ser<br>Met                      | Thr Leu Leu Gly Thr 95         | Phe<br>Arg<br>Pro<br>Gln<br>80<br>Leu |      |
| 135<br>136<br>137<br>139<br>140<br>141<br>143<br>144<br>146<br>150<br>150<br>150<br>150               | <212<br><213<br><400<br>Met<br>1<br>Glu<br>Cys<br>Cys<br>Ala<br>65<br>Ser<br>5 Ser                                     | > TY > OR > SE Asp Lys Lys Pro 50 Asn Ser Asp                               | MGTH<br>PE:<br>GANI<br>QUEN<br>Asp<br>Leu<br>Pro<br>35<br>Glu<br>Leu<br>Gly  | I: 72 PRT SM: ICE: Leu Asp 20 Cys Cys Leu Arg             | 9 Homo 3 Thr 5 Val Leu Arg Leu Gly 85 Lys         | Leu<br>Thr<br>Gln<br>Thr<br>Val<br>70<br>Gly<br>Ser | Leu Ala Arg Pro 55 Arg Ser Arg               | Asp<br>Lys<br>Val<br>40<br>Val<br>Leu<br>Phe | Val<br>25<br>Phe<br>Phe<br>Leu<br>Arg<br>Asn<br>105        | Lys Ser Asp Arg 90 Pro         | Pro Ala Asn Gly 75 Pro Arg            | Cys His Ile 60 Val Gly Arg                 | Gln<br>Lys<br>45<br>Glu<br>Arg<br>Thr  | His<br>30<br>Glu<br>Ala<br>Ser<br>Met<br>Gln<br>110        | Thr Leu Gly Thr 95 Ala         | Phe Arg Pro Gln 80 Leu Ser            |      |
| 135<br>136<br>137<br>139<br>140<br>141<br>143<br>144<br>146<br>150<br>150<br>150<br>150               | <212<br><213<br><400<br>Met<br>1<br>Glu<br>Cys<br>Cys<br>Ala<br>65<br>Ser<br>5 Ser                                     | > TY > OR > SE Asp Lys Lys Pro 50 Asn Ser Asp                               | MGTH<br>PE:<br>GANI<br>QUEN<br>Asp<br>Leu<br>Pro<br>35<br>Glu<br>Leu<br>Gly  | I: 72 PRT SM: ICE: Leu Asp 20 Cys Cys Leu Arg             | 9 Homo 3 Thr 5 Val Leu Arg Leu Gly 85 Lys         | Leu<br>Thr<br>Gln<br>Thr<br>Val<br>70<br>Gly<br>Ser | Leu Ala Arg Pro 55 Arg Ser Arg               | Asp<br>Lys<br>Val<br>40<br>Val<br>Leu<br>Phe | Val<br>25<br>Phe<br>Phe<br>Leu<br>Arg<br>Asn<br>105        | Lys Ser Asp Arg 90 Pro         | Pro Ala Asn Gly 75 Pro Arg            | Cys His Ile 60 Val Gly Arg                 | Gln<br>Lys<br>45<br>Glu<br>Arg<br>Thr  | His<br>30<br>Glu<br>Ala<br>Ser<br>Met<br>Gln<br>110        | Thr Leu Gly Thr 95 Ala         | Phe Arg Pro Gln 80 Leu Ser            |      |
| 135<br>136<br>137<br>139<br>140<br>141<br>143<br>144<br>145<br>150<br>152<br>153<br>156<br>158        | <212<br><213<br><400<br>Met<br>1<br>Glu<br>Cys<br>Cys<br>Ala<br>65<br>Ser<br>5 Ser<br>1<br>Pro                         | > TY<br>> OF<br>> SE<br>Asp<br>Lys<br>Lys<br>Pro<br>50<br>Asn<br>Ser<br>Asp | MGTH<br>PE:<br>GANI<br>QUEN<br>Asp<br>Leu<br>Pro<br>35<br>Glu<br>Leu<br>Gly<br>Gly<br>Arg  | I: 72 PRT ISM: ICE: Leu Asp 20 Cys Cys Leu Arg 100 Leu    | 9 Homo 3 Thr 5 Val Leu Arg Leu Gly 85 Lys Val     | Leu Thr Gln Thr Val 70 Gly Ser                      | Leu Ala Arg Pro 55 Arg Ser Arg               | Asp Lys Val 40 Val Leu Phe Thr Val 120       | Val<br>25<br>Phe<br>Phe<br>Leu<br>Arg<br>Asn<br>105<br>Arg | Lys Ser Asp Arg 90 Pro         | Pro Ala Asn Gly 75 Pro Arg His        | Cys His Ile 60 Val Gly Arg                 | Gln Lys 45 Glu Arg Thr Leu Asp 125     | His<br>30<br>Glu<br>Ala<br>Ser<br>Met<br>Gln<br>110<br>Gly | Thr Leu Gly Thr 95 Ala Val     | Phe Arg Pro Gln 80 Leu Ser Pro        |      |
| 135<br>136<br>137<br>139<br>140<br>141<br>143<br>144<br>145<br>150<br>152<br>153<br>156<br>158        | <212<br><213<br><400<br>Met<br>1<br>Glu<br>Cys<br>Cys<br>Ala<br>65<br>Ser<br>5 Ser<br>1<br>Pro                         | > TY<br>> OF<br>> SE<br>Asp<br>Lys<br>Lys<br>Pro<br>50<br>Asn<br>Ser<br>Asp | MGTH<br>PE:<br>GANI<br>QUEN<br>Asp<br>Leu<br>Pro<br>35<br>Glu<br>Leu<br>Gly<br>Gly<br>Arg  | I: 72 PRT ISM: ICE: Leu Asp 20 Cys Cys Leu Arg 100 Leu    | 9 Homo 3 Thr 5 Val Leu Arg Leu Gly 85 Lys Val     | Leu Thr Gln Thr Val 70 Gly Ser                      | Leu Ala Arg Pro 55 Arg Ser Arg               | Asp Lys Val 40 Val Leu Phe Thr Val 120       | Val<br>25<br>Phe<br>Phe<br>Leu<br>Arg<br>Asn<br>105<br>Arg | Lys Ser Asp Arg 90 Pro         | Pro Ala Asn Gly 75 Pro Arg His        | Cys His Ile 60 Val Gly Arg                 | Gln Lys 45 Glu Arg Thr Leu Asp 125     | His<br>30<br>Glu<br>Ala<br>Ser<br>Met<br>Gln<br>110<br>Gly | Thr Leu Gly Thr 95 Ala Val     | Phe Arg Pro Gln 80 Leu Ser Pro        |      |
| 135<br>136<br>137<br>139<br>140<br>141<br>143<br>144<br>146<br>150<br>150<br>150<br>160<br>160        | <212<br><213<br><400<br>Met<br>1<br>Glu<br>6 Cys<br>2 Ala<br>8 65<br>5 Ser<br>5 Ser<br>1 Pro<br>2 Arg                  | > TY > OR > SE Asp Lys Lys Pro 50 Asn Ser Asp Phe Ala                       | MGTH<br>PE:<br>GANI<br>QUEN<br>Asp<br>Leu<br>Pro<br>35<br>Glu<br>Leu<br>Gly<br>Gly<br>Arg  | I: 72 PRT ISM: ICE: Leu Asp 20 Cys Cys Leu Arg 100 Leu    | 9 Homo 3 Thr 5 Val Leu Arg Leu Gly 85 Lys Val     | Leu Thr Gln Thr Val 70 Gly Ser                      | Leu Ala Arg Pro 55 Arg Ser Arg Asn Asn       | Asp Lys Val 40 Val Leu Phe Thr Val 120       | Val<br>25<br>Phe<br>Phe<br>Leu<br>Arg<br>Asn<br>105<br>Arg | Lys Ser Asp Arg 90 Pro         | Pro Ala Asn Gly 75 Pro Arg His        | Cys His Ile 60 Val Gly Arg                 | Gln Lys 45 Glu Arg Thr Leu Asp 125     | His<br>30<br>Glu<br>Ala<br>Ser<br>Met<br>Gln<br>110<br>Gly | Thr Leu Gly Thr 95 Ala Val     | Phe Arg Pro Gln 80 Leu Ser Pro        |      |
| 135<br>136<br>137<br>139<br>140<br>141<br>143<br>144<br>145<br>150<br>153<br>153<br>163<br>163<br>163 | <212<br><213<br><400<br>Met<br>1<br>1<br>6 Glu<br>6 Cys<br>9 Cys<br>9 Ala<br>8 65<br>5 Ser<br>1<br>1 Pro<br>2<br>4 Arg | > TY<br>> OF<br>> SE<br>Asp<br>Lys<br>Lys<br>Pro<br>50<br>Asn<br>Ser<br>Asp | MGTHERES CONTROLLED CO | I: 72 PRT SM: ICE: Leu Asp 20 Cys Cys Leu Arg 100 Leu Ala | 9 Homo 3 Thr 5 Val Leu Arg Leu Gly 85 Lys Val Leu | Leu Thr Gln Thr Val 70 Gly Ser Pro Cys              | Leu Ala Arg Pro 55 Arg Ser Arg Asn Asn 135   | Asp Lys Val 40 Val Leu Phe Thr Val 120 Tyr   | Val<br>25<br>Phe<br>Phe<br>Leu<br>Arg<br>Asn<br>105<br>Arg | Lys Ser Asp Arg 90 Pro Ile Gly | Pro Ala Asn Gly 75 Pro Arg His Gln    | Cys His Ile 60 Val Gly Arg Met Asn 140     | Gln Lys 45 Glu Arg Thr Leu Asp 125 Pro | His<br>30<br>Glu<br>Ala<br>Ser<br>Met<br>Gln<br>110<br>Gly | Thr Leu Gly Thr 95 Ala Val Asp | Phe Arg Pro Gln 80 Leu Ser Pro Leu    |      |
| 135<br>136<br>137<br>139<br>140<br>141<br>143<br>144<br>146<br>150<br>150<br>150<br>160<br>160<br>161 | <212<br><213<br><400<br>Met<br>1<br>Glu<br>6 Cys<br>2 Ala<br>8 65<br>5 Ser<br>5 Ser<br>1 Pro<br>2 Arg                  | > TY<br>> OF<br>> SE<br>Asp<br>Lys<br>Lys<br>Pro<br>50<br>Asn<br>Ser<br>Asp | MGTHERES CONTROLLED CO | I: 72 PRT SM: ICE: Leu Asp 20 Cys Cys Leu Arg 100 Leu Ala | 9 Homo 3 Thr 5 Val Leu Arg Leu Gly 85 Lys Val Leu | Leu Thr Gln Thr Val 70 Gly Ser Pro Cys              | Leu Ala Arg Pro 55 Arg Ser Arg Asn Asn 135   | Asp Lys Val 40 Val Leu Phe Thr Val 120 Tyr   | Val<br>25<br>Phe<br>Phe<br>Leu<br>Arg<br>Asn<br>105<br>Arg | Lys Ser Asp Arg 90 Pro Ile Gly | Pro Ala Asn Gly 75 Pro Arg His Gln    | Cys His Ile 60 Val Gly Arg Met Asn 140 Arg | Gln Lys 45 Glu Arg Thr Leu Asp 125 Pro | His<br>30<br>Glu<br>Ala<br>Ser<br>Met<br>Gln<br>110<br>Gly | Thr Leu Gly Thr 95 Ala Val Asp | Phe Arg Pro Gln 80 Leu Ser Pro Leu    |      |

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/061,201

DATE: 02/27/2002
TIME: 08:27:47

Input Set : D:\pto\_PB0178.txt

| 170<br>171 | Asn | Trp        | Tyr  | Gln | Gly<br>165 | Glu    | Ile  | Asn    | Gly | Ile<br>170 | Ser | Gly | Asn | Phe | Pro<br>175 | Ala |
|------------|-----|------------|------|-----|------------|--------|------|--------|-----|------------|-----|-----|-----|-----|------------|-----|
| 173<br>174 |     | Ser        |      | 180 |            |        |      |        | 185 |            |     |     |     | 190 |            |     |
| 176<br>177 |     | Ala        | 195  |     |            |        |      | 200    |     |            |     |     | 205 |     |            |     |
| 180        |     | Asp<br>210 |      |     |            |        | 215  |        |     |            |     | 220 |     |     |            |     |
| 183        | 225 | Val        |      |     |            | 230    |      |        |     |            | 235 |     |     |     |            | 240 |
| 186        |     | Phe        |      |     | 245        |        |      |        |     | 250        |     |     |     |     | 255        |     |
| 189        |     | Glu        |      | 260 |            |        |      |        | 265 |            |     |     |     | 270 |            |     |
| 192        |     | Val        | 275  |     |            |        |      | 280    |     |            |     |     | 285 |     |            |     |
| 195        |     | Gly<br>290 |      |     |            |        | 295  |        |     |            |     | 300 |     |     |            |     |
| 198        | 305 | Asn        |      |     |            | 310    |      |        |     |            | 315 |     |     |     |            | 320 |
| 201        |     | Glu        |      |     | 325        |        |      |        |     | 330        |     |     |     |     | 335        |     |
| 204        |     | Thr        |      | 340 |            |        |      |        | 345 |            |     |     |     | 350 |            |     |
| 207        |     | Val        | 355  |     |            |        |      | 360    |     |            |     |     | 365 |     |            |     |
| 210        |     | Val<br>370 |      |     |            |        | 375  |        |     |            |     | 380 |     |     |            |     |
| 213        | 385 | Val<br>Gln |      |     |            | 390    |      |        |     |            | 395 |     |     |     |            | 400 |
| 216        |     | Leu        |      |     | 405        |        |      |        |     | 410        |     |     |     |     | 415        |     |
| 219        |     | Leu<br>Asn |      | 420 |            |        |      |        | 425 |            |     |     |     | 430 |            |     |
| 222        |     | Arg        | 435  |     |            |        |      | 440    |     |            |     |     | 445 |     |            |     |
| 225        |     | 450<br>Ser |      |     |            |        | 455  |        |     |            |     | 460 |     |     |            |     |
| 228        | 465 |            |      |     |            | 470    |      |        |     |            | 475 |     |     |     |            | 480 |
| 231        |     |            |      |     | 485        |        |      |        |     | 490        |     |     |     |     | 495        | Gly |
| 234        |     |            |      | 500 |            |        |      |        | 505 |            |     |     |     | 510 |            | Ser |
| 237        | ,   | l Ser      | 515  | ,   |            |        |      | 520    |     |            |     |     | 525 |     |            |     |
| 240        | )   | 530        |      |     |            |        | 535  | i      |     |            |     | 540 |     |     |            | Pro |
| 242        | val | ьeu        | MI G | FIC | , GIII     | . 5111 | 1110 | . 0111 |     | -1+        |     |     |     | - 1 |            |     |

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/061,201

DATE: 02/27/2002
TIME: 08:27:47

Input Set : D:\pto\_PB0178.txt

|                        |   |       |            |       |       |       |       |             |       |       | - <b></b> |      |      |       |       | F.C.0  |     |
|------------------------|---|-------|------------|-------|-------|-------|-------|-------------|-------|-------|-----------|------|------|-------|-------|--------|-----|
|                        | 545   |       |            |       | _     | 550   |       | <b>_</b>    |       |       | 555       | _    | _    | _     |       | 560    |     |
|                        | Ser   | Ser   | Pro        | Ser   |       | Val   | Val   | Val         | Glu   |       | Gly       | Ser  | Lys  | Pro   | Ala   | Leu    |     |
| 246                    |   |       |            |       | 565   |       |       |             |       | 570   |           |      |      | _     | 575   |        |     |
| 248                    | Thr   | Gly   | Glu        | Pro   | Ala   | Leu   | Thr   | Cys         |       | Ser   | Arg       | Gly  | Ser  |       | Ala   | Arg    |     |
| 249                    |   |       |            | 580   |       |       |       |             | 585   |       |           |      |      | 590   |       |        |     |
| 251                    | Thr   | His   | Ser        | Ala   | Ala   | Ser   | Ser   | Leu         | Ile   | Met   | Glu       | Asp  | Lys  | Glu   | Ile   | Pro    |     |
| 252                    |   |       | 595        |       |       |       |       | 600         |       |       |           |      | 605  |       |       |        |     |
| 254                    | Ile   | Lys   | Ser        | Glu   | Pro   | Leu   | Pro   | Lys         | Pro   | Pro   | Ala       | Ser  | Ala  | Pro   | Pro   | Ser    |     |
| 255                    |   | 610   |            |       |       |       | 615   |             |       |       |           | 620  |      |       |       |        |     |
| 257                    | Ile   | Leu   | Val        | Lys   | Pro   | Glu   | Asn   | Ser         | Arg   | Asn   | Gly       | Ile  | Glu  | Lys   | Gln   | Val    |     |
|                        | 625   |       |            | -     |       | 630   |       |             | _     |       | 635       |      |      |       |       | 640    |     |
|                        |   | Thr   | Val        | Arq   | Phe   | Gln   | Asn   | Tyr         | Ser   | Pro   | Pro       | Pro  | Thr  | Lys   | His   | Tyr    |     |
| 261                    |   |       |            | 5     | 645   |       |       | -1-         |       | 650   |           |      |      | -     | 655   | -      |     |
|                        | Thr   | Ser   | His        | Pro   |       | Ser   | Glv   | Lvs         | Pro   |       | Gln       | Pro  | Ala  | Thr   | Leu   | Lvs    |     |
| 264                    | 1111  | 501   | 1110       | 660   |       | 001   | 011   | <b>D</b> 12 | 665   | 01.   |           |      |      | 670   |       | -4-    |     |
|                        | λla   | Car   | Gln        |       | Glu   | Δla   | Δla   | Ser         |       | Glv   | Pro       | Glu  | Met  |       | Val   | Leu    |     |
| 267                    | пта   | DCI   | 675        | 110   | Olu   | niiu  | mu    | 680         | шец   |       |           | CIG  | 685  |       |       |        |     |
|                        | Dha   | 7.1.  |            | λνα   | Cor   | C111  | Ctrc  |             | Sar   | C1 v  | Gln       | Gln  |      | Aen   | Leu   | Δτα    |     |
|                        | PHE   | 690   | птъ        | Arg   | ser   | GIY   | 695   | шта         | 361   | Gry   | GIII      | 700  | 1111 | пор   | пси   | HI 9   |     |
| 270                    | 7 ~   |       | Cam        | 7 l a | Tou   | 71-   |       | 7.1.        | ⊞h r  | Пhr   | Tou       |      | Car  | Thr   | Ala   | Sar    |     |
|                        |   | гуѕ   | Sei        | Ala   | ьeu   |       | гуу   | АІА         | TIII  | TIII  | 715       | val  | 261  | TIIT  | Ala   | 720    |     |
|                        | 705   | m1    | <b>a</b> 1 | m1    | 77- 7 | 710   | D     | C           | T     |       | 113       |      |      |       |       | 720    |     |
|                        | GIY   | Thr   | GIN        | Thr   |       | Pne   | PIO   | Ser         | цуѕ   |       |           |      |      |       |       |        |     |
| 276                    |   |       |            |       | 725   |       |       |             |       |       |           |      |      |       |       |        |     |
| 278 <210> SEQ ID NO: 4 |   |       |            |       |       |       |       |             |       |       |           |      |      |       |       |        |     |
|                        | 279 <211> LENGTH: 2086<br>280 <212> TYPE: DNA |       |            |       |       |       |       |             |       |       |           |      |      |       |       |        |     |
|                        |   |       |            |       |       |       |       |             |       |       |           |      |      |       |       |        |     |
|                        |   | 3> OI |            |       |       | sar   | oiens | 3           |       |       |           |      |      |       |       |        |     |
|                        |   | 0> SI |            |       |       |       |       |             |       |       |           |      |      |       |       |        | 60  |
|                        |   |       |            |       |       |       |       |             |       |       |           |      |      |       |       | gagggc |     |
|                        |   |       |            |       |       |       |       |             |       |       |           |      |      |       |       | acatgo |     |
|                        |   |       |            |       |       |       |       |             |       |       |           |      |      |       |       | ctgacc |     |
|                        |   |       |            |       |       |       |       |             |       |       |           |      |      |       |       | gatgat |     |
|                        |   |       |            |       |       |       |       |             |       |       |           |      |      |       |       | acagcc |     |
|                        |   |       |            |       |       |       |       |             |       |       |           |      |      |       |       | aaggcc |     |
|                        |   |       |            |       |       |       |       |             |       |       |           |      |      |       |       | gcgctg |     |
|                        |   |       |            |       |       |       |       |             |       |       |           |      |      |       |       | ccggg  |     |
|                        |   |       |            |       |       |       |       |             |       |       |           |      |      |       |       | agcagg |     |
|                        |   |       |            |       |       |       |       |             |       |       |           |      |      |       |       | atccac |     |
| 294                    | atg   | gatg  | ggg .      | tgcc  | tcgag | gc aa | aaggo | cctta       | a tgo | caact | taca      | gag  | ggca | gaa   | tacag | ggtgac | 660 |
| 295                    | cta   | aggti | tta a      | ataa  | gggag | ga ta | atcat | cctt        | cto   | ccgga | agac      | agct | ttga | tga . | gaati | tggtac | 720 |
| 296                    | cag   | gggga | aaa '      | tcaa  | tggca | at ca | agcg  | ggaad       | c tto | ccca  | gcca      | gct  | ccgt | gga . | agtca | atcaag | 780 |
| 297                    | cag   | ctgc  | ccc a      | agcc  | gccc  | cc go | ctctq | gcag        | g gc  | cata  | taca      | act  | toga | cct . | acga  | ggcaag | 840 |
|                        |   |       |            |       |       |       |       |             |       |       |           |      |      |       |       | gtgatc |     |
|                        |   |       |            |       |       |       |       |             |       |       |           |      |      |       |       | ttccct |     |
|                        |   |       |            |       |       |       |       |             |       |       |           |      |      |       |       | ggtcgc |     |
|                        |   |       |            |       |       |       |       |             |       |       |           |      |      |       |       | acgtct |     |
|                        |   |       |            |       |       |       |       |             |       |       |           |      |      |       |       | acaaca |     |
|                        |   |       |            |       |       |       |       |             |       |       |           |      |      |       |       | gagatc |     |
|                        |   |       |            |       |       |       |       |             |       |       |           |      |      |       |       | gagaaa |     |
|                        | , ,   |       | ,          | J     |       |       |       | •           |       |       |           |      |      | -     | ٠.    | -      |     |

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/061,201

DATE: 02/27/2002 TIME: 08:27:48

Input Set : D:\pto\_PB0178.txt

Output Set: N:\CRF3\02272002\J061201.raw

L:7 M:270 C: Current Application Number differs, Replaced Current Application No

L:7 M:271 C: Current Filing Date differs, Replaced Current Filing Date